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**NATIONAL STANDARD OF THE
PEOPLE'S REPUBLIC OF CHINA**

GB/T 17268-2020

Replacing GB/T 17268-2009

Non-refillable steel welded cylinders for industrial use

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Foreword

This standard was drafted in accordance with the rules given in GB/T 1:1-2009:

This standard replaces GB/T 17268-2009 "Industrial Non-refillable Welded Steel Cylinders", compared with GB/T 17268-2009, except for

The main technical changes outside of the editorial modification are as follows:

---Modified the scope of application of the standard (see Chapter 1, Chapter 1 of the:2009 edition);

---Modified the requirements for bottle body materials and welding materials (see 6:1:1, 6:1:3, 6:1:1, 6:1:3 of the:2009 edition);

---Added the welding method requirements for the pressure welding seam connecting the

valve seat and the cylinder body (see 9:2:3);

---Added material verification test and wall thickness measurement requirements (see 10:1, 10:3:1);

---Modified the requirements of the air pressure test (see 10:2:2, 10:1:2 of the:2009 edition);

---Added the artificial aging requirements for the water pressure blasting test sample bottle (see 10:3:3:1);

---Modified the welding procedure qualification (see Appendix B, Appendix B of the:2009 edition);

---Modified the welder examination rules (see Appendix C, Appendix C of the:2009 edition);

--- Added Appendix D "Yield Point Extension" (see Appendix D):

This standard uses the redrafting method to refer to the edition of ISO 11118:2015 "Specifications and test methods for non-refillable metal gas cylinders for gas cylinders"

The degree of consistency with ISO 11118:2015 is not equivalent:

Please note that certain contents of this document may involve patents: The issuing agency of this document is not responsible for identifying these patents:

This standard was proposed and managed by the National Gas Cylinder Standardization Technical Committee (SAC/TC31):

Drafting organizations of this standard: Zhejiang Jucheng Steel Cylinder Co., Ltd., China Special Equipment Inspection and Research Institute, Shanghai Special Equipment Supervision and Inspection Technology

Research Institute, Zhejiang Golden Elephant Technology Co., Ltd., Wuyi Xilinde Machinery Manufacturing Co., Ltd., Sanjiang Kaiyuan Co., Ltd., Zhejiang Ansheng Machinery Manufacturing

Co., Ltd., Jiangsu Kaisidi Chemical Machinery Co., Ltd:

1 Scope

This standard specifies the type, design, manufacturing, inspection rules and test methods of industrial non-refillable welded steel cylinders (hereinafter referred to as steel cylinders)

Method, marking, coating, etc:

This standard is suitable for use at ambient temperature of -40 degrees C~60 degrees C, test pressure $PT \leq 6.2 \text{ MPa}$ (gauge pressure), volume $V \leq$

25L, $PTV \leq 100 \text{ MPa} \cdot \text{L}$ (when $PT > 4.5 \text{ MPa}$, $V \leq 5 \text{ L}$), non-refilling toxicity is classified as

Class A refrigeration according to GB/T 7778

(Liquid gas at low pressure):

Note: Steel cylinders must not be used to fill compressed gas:

2 Normative references

The following documents are indispensable for the application of this document: For dated reference documents, only the dated version applies to this article

Pieces: For undated references, the latest version (including all amendments) applies to this document:

GB/T 222 The allowable deviation of the chemical composition of the finished steel

GB/T 223:9 Steel and alloy determination of aluminum content-Chromazurol S spectrophotometric method

GB/T 223:59 Steel and alloy determination of phosphorus content-Bismuth phosphomolybdenum blue spectrophotometric method and antimony phosphomolybdenum blue spectrophotometric method

GB/T 223:63 Methods for chemical analysis of iron, steel and alloy-The sodium (potassium) periodate photometric method for the determination of manganese content

GB/T 223:64 Steel and alloy determination of manganese content by flame atomic absorption spectrometry

GB/T 223:68 Methods for chemical analysis of iron, steel and alloy, the determination of sulfur content by potassium iodate titration after combustion in a tube furnace

GB/T 223:69 Steel and alloy carbon content determination after combustion in tube furnace gas volume method

GB/T 228:1 Tensile Test of Metallic Materials Part 1: Room Temperature Test Method

GB/T 1804 General Tolerance Tolerance of linear and angular dimensions without tolerance

GB/T 2653 Bend test method for welded joints

GB/T 2975 Steel and steel product mechanical performance test sampling location and sample preparation

GB/T 4336 Carbon steel and low- and medium-alloy steel determination of multi-element content Spark discharge atomic emission spectrometry (conventional method)

GB/T 5213 Cold rolled low carbon steel plate and steel strip

GB/T 13005 Gas cylinder terminology

GB/T 14193 Liquefied gas cylinder filling regulations

GB/T 16918 Bursting disc safety device for gas cylinders

GB/T 17878 Industrial bottle valves for non-refillable welded steel cylinders

GB/T 20066 Sampling and sample preparation methods for the determination of the chemical composition of steel and iron

NB/T 47018:3 Technical conditions for ordering welding consumables for pressure equipment Part 3: Gas shielded arc welding wire and filler wire

TSGZ6001 Special equipment operator assessment rules

3 Terms and definitions

The following terms and definitions defined in GB/T 13005 apply to this document: